

Land Use/Land Cover Map Units

Eight map units represent classes within the land use/land cover (LUC) classification system developed by Anderson et al. (1976). This classification is designed to meet the needs of Federal and State agencies for a uniform categorization of data from satellite and aircraft remote sensors. It is built on a hierarchical system of 4 levels to fit the classifying needs from satellite type sensor data (Level I) to low-altitude photo imagery data (level IV; <1:20,000-scale).

The Level II of this LUC classification system is used to represent LUC situations for the mapping project. Although the set of photographs used for the mapping is of a scale of 1:15,840, Level II is used as the Program's standard. LUC Level II classes are used for map units not classified by the USNVC Natural/Semi-natural or Planted/Cultivated types, such as populated areas, roads, agricultural lands, quarries, and open water bodies that are <10% vegetated. Eight LUC Level II classes were used to represent these situations. Although 8 LUC classes are represented directly by map units, all LUC classes are built into the spatial database map within a crosswalk field to all map units. Only those 8 LUC classes that are not classified by USNVC or other park specific map classes are discussed here. For full documentation of all LUC classes, refer to the classification system (Anderson et al.).

The following lists the Level II classes (with LUC codes in front) that are used for this project along with their corresponding map unit codes:

- 1 Urban or Built-up Land
 - 11 Residential (*Map Unit Code UR*)
 - 12 Commercial and Services (*Map Unit Code UC*)
 - 14 Transportation, Communications, and Utilities (*Map Unit Code UT*)
- 2 Agricultural Land
 - 21 Cropland and Pasture* (*Map Unit Code ACP*)
 - 22 Other Urban or Built-up Land (*Map Unit Code ARB*)
- 5 Water
 - 51 Streams and Canals (*Map Unit Code WS*)
 - 52 Lakes** (*Map Unit Code WLK*)
- 7 Barren Land
 - 75 Strip Mines, Quarries, and Gravel Pits (*Map Unit Code BLQ*)

* Although Cropland and Pasture is currently within the USNVC, monotypic agriculture vegetation was in the initial stages of development. With the LUC Level II classification being a standardized classification firmly in place, it was decided to keep the ACP Map Unit representation as it was.

** Water levels of all the large lakes, including Rainy, Kabetogama, Namakan, and Sand Point Lakes, are affected to some degree by water control structures. However, the size and irregular shapes of their shorelines give the appearance of natural lakes. Thus, it was decided to use the Level II Lakes (52) Class rather than the Level II Reservoir (53) Class.